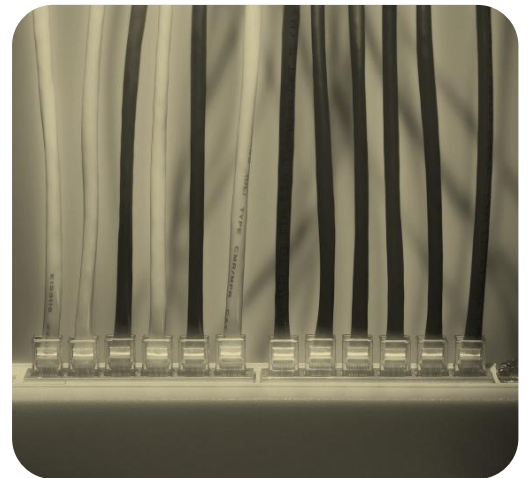**KANSAS**

Department of Administration

Division of Information Systems and Communications
(DISC)

FY 2007 Annual Report

Denise Moore, Director

The Director's Message

The Division of Information Systems and Communications, also known as DISC, continues to evolve and improve the way we do business. Activities and achievements this past year have been numerous and wide-ranging, from beginning a comprehensive upgrade to the state's telecommunications infrastructure to going green.

Wireless technologies continue to mature and advance with over 120 access points used by 17 agencies throughout the state. DISC collaborated with the Board of Regents on a consolidated wide area network infrastructure for the state KanWIN and Kan-ed networks to achieve greater efficiencies and improve services while reducing redundancy and costs.

To improve the business of state government, various software applications have been enhanced or created. Of notable importance was the successfully completion of the third major upgrade to the statewide human resources and payroll system. Legislative action brought about the development of the KanView website, an online solution that brings better visibility, openness, and accessibility to state government financial activity for Kansas taxpayers. And work began in earnest on the state's new financial management system with completion slated for the fall of 2010.

The state's first web accessibility director was hired in 2007 in support of the Governor's commitment to ensuring web-based technologies and services are accessible to individuals with disabilities. Security and disaster recovery are constantly being monitored and augmented to protect the state's information technology resources and continue to conduct business in the event of a disaster or cyber attack. A number of data center improvements were undertaken such as data center modernization, efficiency in the storage and management of data, as well as making better use of server hardware.

DISC works hard to maintain and improve services to customers by continuing to provide IT support for small agencies, boards and commissions. DISC also assists with significant agency efforts such as the Attorney General's network conversion, providing IT support for the newly created Kansas Health Policy Authority, and re-wiring the statehouse during its renovation.

Governmental effectiveness and customer service are always at the forefront of how we conduct the business of DISC. A number of cooperative initiatives were undertaken in support of reducing costs through strategic sourcing processes. And we continuously look at ways to improve our organizational effectiveness and enhance services to our customers while effectively managing costs and providing value.

Respectfully submitted,

Denise Moore
Director, Department of Information Systems & Communications
Chief Information Technology Officer – Executive Branch

The DISC Organization

DISC is responsible for providing efficient electronic information processing and technical management services to all state agencies. These services include data processing, voice-data telecommunications, and video processing. In addition, DISC is responsible for providing efficient and effective mail services for Topeka-based agents.

DISC is committed to excellence in customer service, providing IT services and products that our customers need and want at the lowest cost possible. DISC is a fee-based organization best known for serving state government. However, our customers also include local governmental organizations such as city and county governments, education, health care, and law enforcement agencies throughout the state. Providing the best possible service to our customers enables them to better serve the people of Kansas.

DISC is a division of the Kansas Department of Administration. However, to reflect the critical nature of technology in supporting the mission of state government, the organization reports directly to the Governor. DISC is organized into operational units, each focused on a particular aspect of our business.

Bureau of Administrative Services (BAS)
As the business service unit of DISC, BAS provides human resources, budgeting, rate setting, accounts payable and receivable, contract and service level agreement management, office support, enterprise business contingency planning, and central mail services.

Bureau of the Department of Administration Systems (BDAS)
BDAS provides support for statewide applications including SHARP (human resources and payroll), STARS (financial), Setoff (debt recovery), BMS (budget), and KIRMS (workflow tracking and billing system).

Bureau of Information Systems (BIS)
BIS provides support for the state's mainframe and mid-range computer platforms and manages the state's primary computer hosting center and off-site data recovery center 24 hours a day, seven days a week. The mid-range platforms support client/server and web-based applications such as the statewide human resource and payroll system and Revenue tax applications. The mainframe platform provides vital computing services for the Departments of Social and Rehabilitation Services, Labor, Transportation, Revenue, and Administration.

Bureau of Customer Services (BOCS)
BOCS provides support for the Department of Administration's server and desktop platforms. The Small Agency Support section provides a full range of IT services for small agencies, commissions and licensing boards. Enterprise Internet Services provides e-government services including web hosting and application development for the Governor's Office, Lt. Governor's Office, Department of Administration, DISC, and other associated organizational units.

Bureau of Telecommunications (BOT)
BOT provides a full line of telecom services to Kansas governmental entities. The Telecom Support Services Group is the primary customer contact group and initiates all work order requests for telecom services. The Engineering and Planning Group offers architecture, design and capacity management services for network customers. A recently established Network

Analysis Group provides networking tool support for both DISC and agency customers. Support for all telecommunication services and products are managed through the Network Operations Center 24 hours a day, seven days a week.

Kansas Information Technology Office (KITO)
KITO was established to support State IT Governance statutes. Enterprise information technology coordination and collaboration services, including support for the executive, legislative and judicial Chief Information Technology Officers (CITO) and the Chief Information Technology Architect (CITA), are provided. KITO is comprised of three functional areas: 1) Enterprise Architecture; 2) Project Management; and 3) Geographic Information Systems (GIS). KITO provides support for the activities of the Information Technology Advisory Board, the Geographic Information Systems Policy Board, and the Information Technology Executive Committee.

Enterprise Security Office – Security (ESO)
ESO collaborates with various units within DISC and with our customers to develop and maintain an enterprise computer intrusion detection and prevention security system. ESO helps with the planning and engineering of enhanced security solutions to meet changing cyber threats. ESO also works closely and supports the activities of the Information Technology Security Council.

Enterprise Services – Technical Support (ES)
ES was created to facilitate effective analysis, troubleshooting and closure of particularly difficult problems that occur both within DISC and across multiple agencies. With the size and complexity of the state's network, problems often cross agency equipment, wide area network links, local area networks, the campus network, and the Internet. ES is called upon to assist with and coordinate enterprise problems to affect a proper and timely solution. Additionally, the team performs planning, research and development of new and existing technologies within the State of Kansas, assisting DISC and state agencies with their implementation.

Initiatives

Improved Networking

Stabilization: In the first quarter of 2007 telecommunications personnel enhanced the existing local area network (LAN) infrastructure using structured planning and execution. The result was an approximate 22,000 hour increase in workforce productivity in 2007 compared to 2006.

Kansas Wide Area Network (KanWIN) Upgrade: After six months of study and research, DISC accepted a recommendation from a national network solutions provider, Calence, to upgrade the KanWIN infrastructure. Pre-planning began in August 2007 and is currently in the execution phase. Detailed engineering for the core and distribution foundational segment of the network is complete. To date, the upgrade initiative has resulted in a new network architecture, new infrastructure design, a new network service (GET/VPN), and another network service (Digital Media) to be demonstrated in the first half of 2008. The upgrade will continue throughout 2008, completing at the end of the first quarter 2009.

Wireless Local Area Network (WLAN) Expansion: Over the last year, KanWIN has seen a substantial increase in the use of its enterprise wireless systems. There are currently 17 State agencies using the system, with over 120 access points throughout the state. At any given time, almost 200 people are using the WLAN system with the number expected to continue climbing. New features coming this year include higher bandwidth and full wireless meshed networking. In addition to standard WLAN customer access, DISC also provides wireless bridging between buildings where leased line service is either too difficult or cost prohibitive. Customers can choose from an entirely DISC-managed WLAN system to one where DISC provides the basic infrastructure, offering customers greater flexibility in managing their wireless technology.

Organizational Enhancement: Based on recommendations from the Calence study, an effort to improve the overall effectiveness of the telecommunications organization was initiated in 2007. To date, the initiative has resulted in enhanced engineering methodologies, a heightened emphasis on operational efficiency and better use of network tools. The effort is expected to continue through 2008 and result in an organization with the enhanced capabilities needed to serve Kansas in a changing telecommunications environment.

New and improved Applications

Statewide Services and Resources Directory: Working with the Natural Resources Sub-Cabinet to develop requirements, a web-based statewide service and resource directory working prototype was developed as an initiative of the Governor's Office.

Time Reporting: A new time reporting system providing necessary information for auditors to track project hours for federal Medicaid funding was developed for the newly established Kansas Health Policy Authority.

Carpool and Ride Matching Application: Another initiative of the Governor's Office was developed to encourage and facilitate car pooling across the state. Without any direct intervention or coordination from state government, the system is entirely self-maintaining with communication strictly between ride sharing participants. The application is also available to the public.

Web-based Budget and Reporting System: The Division of Budget, with assistance from DISC, began upgrading the state's budget and reporting system to a new Internet browser-based application.

Taxpayer Transparency Act: In the spring of 2007, a bill was introduced in the Kansas Legislature known as the "Taxpayer Transparency Act". The Act required the Department of Administration to develop a free web site that would permit the public to search and view current and historical financial data and eventually state employee pay. DISC staff initiated the effort with the Information Network of Kansas to develop a prototype of the web site, which was presented to the new Public Finance Transparency Board in November and subsequently become available to the public March 1, 2008.

Kansas Information Resources Management System (KIRMS): KIRMS continues to be improved and enhanced, including automating critical processes across DISC bureaus and state agencies to replace numerous manual and home-grown systems. KIRMS improves cost allocation and time reporting systems by analyzing workflow and staffing needs. During 2007 a Help Desk for both internal and external users was established.

Statewide Human Resources and Payroll Systems (SHARP): The Department of Administration successfully completed the third major SHARP upgrade project in July 2007. The upgrade was a cooperative effort between the Divisions of Accounts and Reports, Information Systems and Communications, Personnel Services, and state agencies.

Statewide Financial Management System: During calendar year 2007, DISC provided project management and fiscal administration support for a project to implement a new statewide financial management system. After assisting with research and testimony on the project to various legislative committees in the spring, the initial planning for the "Pre-Implementation" phase of the project was conducted and the project began in the fall of 2007.

Web Accessibility: The state's first web accessibility director was recently hired to, among other things, collaborate with state agencies, boards, and commissions to develop a comprehensive strategy to ensure that web-based technologies and services are accessible to and usable by individuals with disabilities. The director will also participate in the formulation of policies and standards and promote the initiative across the enterprise to gain greater awareness of issues and successes. Initial efforts will be directed at assisting state agencies with education, knowledge sharing, and resources to assist their accessibility initiatives and goals.

Governmental Effectiveness

Strategic Sourcing: The continued reduction of costs using strategic sourcing processes is the hallmark of vendor management and furthers the efforts of the early budget efficiency and saving teams' initiative. Examples from this year include an analysis of the State's IT spending, as well as providing new contracting capabilities such as a state IT training contract and a soon to be completed web hosting and development contract. The master IT services contract has been divided into categories of services with each category being rebid to make contracting of IT services much more efficient. A web site was developed which features some of the frequently used money saving contracts as well as IT purchasing best practices.

Advanced Security

DISC is continually enhancing the state's security position. An enterprise security intrusion detection and prevention security system provides protection from computer attacks and assists in identifying agency computers that have been compromised, preventing the spread of numerous viruses or malware throughout the enterprise. Web content filtering is another area which is helping secure the network from questionable content websites.

Commitment to Green Computing

In 2007, DISC stepped up green computing with the installation of more efficient power distribution equipment in the data center reducing the number of circuits needed to power servers and storage systems thereby delaying or reducing the need to add electrical capacity to the data center. Server virtualization was introduced which will result in a 70% to 80% reduction of electrical consumption by physical servers. Energy Star PCs and servers are being exclusively purchased and power management software which automatically powers down idle computer components after a pre-set period of time has been installed on all department desktop computers.

Business Continuity Growth

Disaster Recovery: A joint venture was initiated with the departments of Labor, SRS, Transportation, Wichita State University, and the Legislative branch to establish a disaster recovery data center in Wichita. A location to meet immediate needs is being finalized. A long term comprehensive strategy is under development.

Data center computer operations contracted to provide disaster recovery for the multitude of print services supported by DISC. This agreement ensures that DISC can continue to print critical state warrants and various business forms and documents should an event render the primary print facility unusable.

Business Contingency Management (BCM): Business contingency management training and coordination was provided to disaster recovery teams throughout each of the DISC bureaus. The BCM team also manages and coordinates the annual hot site recovery exercise with this year's exercise involving six participating State agencies as well as four DISC bureaus. Members of the BCM team serve and assist the Homeland Security Working Group, Advisory Committee to the Joint Committee on Kansas Security, and the Kansas Continuity of Operations (COOP) Committee.

Data Center System Improvements

Modernization: To stay up to date with current technology, DISC is conducting an ongoing modernization of the primary data center in the Landon building, an upgrade to the state's shared mainframe environment, and numerous software and infrastructure enhancements in the distributed (open) systems environments.

Preprinted warrant numbers used for several warrant applications were phased out, thus saving on reprint and manual operator intervention on remakes.

Storage Management: In order to address agency requests for public documents, many of which reside in e-mail systems, DISC has implemented a fully indexed e-mail archiving solution. In addition to extensive search capabilities, the system provides for a continual reduction of disk space through the use of single instance storage technology.

In the Tivoli Storage Manager area DISC added a data domain storage device to the newest storage server. This device provides local backup data on disk rather than tape. It also utilizes a data-duplication algorithm that compresses data intelligently to maximize physical disk usage.

Shared data storage is also provided for all computing platforms including personal computers and small servers.

Virtualization: DISC implemented server virtualization, a technique that includes making a single physical resource appear to function as multiple logical resources. This process vastly improves utilization of server hardware, while providing a significant reduction of heat load and power consumption in the data center. The new virtualized platforms have also

provided the Department with a rapid recovery tool for individual workstations and application servers and an efficient disaster recovery solution. Further deployment of virtualization will take place in the coming year.

Continuous Customer Assistance

Service Catalog: DISC developed a catalog of the services provided, pricing, cost drivers, expectations, and cost savings tips to maximize services, providing a clear, customer-centered publication of services to help customers understand what we do.

Small Agency Support: This group continues to provide much needed technical assistance to smaller agencies, boards and commissions that do not have IT staff or lack sufficient training for IT staff. Examples of services include total infrastructure replacement including workstations, servers, operating systems, application software, and conversion of databases to current releases; low-cost, reliable email services to over 200 small agency users that cannot afford to maintain email systems; and database development services enabling the replacement of numerous antiquated and unsupported IT applications with state of the art software.

Statehouse Support: Between September and December 2007, DISC personnel performed a total rebuild of the Statehouse west wing communications infrastructure. The rebuild included the network backbone, all House of Representatives and legislative support personnel workstations, the Legislative Services data center and the House chamber voting equipment and audio system. All work was completed on schedule and in a manner conducive to a smooth and efficient start to the 2008 legislative session.

Attorney General Network Conversion: DISC is currently working on a project to convert the Kansas Attorney General's network from a Novell/GroupWise environment to a Microsoft Windows/Exchange environment. This effort will include a new email system, new servers and reconfigured desktop computers. Work is expected to be completed in the spring of 2008.

Kansas Health Policy Authority (KHPA) Support: DISC maintains four technical positions to provide support for desktops and servers, and database administration for the newly established KHPA. The effort involved surmounting significant challenges of building a new infrastructure, application servers and e-mail system. In addition to general daily support, this team has dealt with the logistics with an agency that has nearly tripled in size since its inception.

Customer Relationships: Improved service to our customers continued to be an important initiative during 2007. One-on-one visits with both external and internal customers provided many insights into these important relationships. Additionally, web-based survey tools were employed to gather

feedback, enabling a wider sampling of comments, perceptions and suggestions for improvement of services and a better understanding customer needs and expectations. Customer Service will continue to be a high priority as DISC moves forward with technical and service related projects.

Project Management Achievements

Kansas places a great emphasis on project management, with solid ITEC policies and statutes for managing and reporting projects. During the past year, 56 people attended classes with 28 completing the Kansas project management methodology certification program. The result is better trained project managers that effectively manage and ensure the state's IT projects are delivered on time and on budget. The 2008 training program will establish a pathway to support students working toward the globally recognized Project Management Professional (PMP) certification.

IT project management oversight was provided for approximately 30 to 35 active projects totaling over $155,000,000 dollars. Nineteen (19) projects successfully completed in SFY2007 totaling $17,524,074

Project Management Methodology (PMM) Refresh: The purpose of this effort is to refresh the Kansas PMM with input from agency focus groups to improve the PMM's ease of use and broaden its applicability while continuing to maintain appropriate oversight. The objectives are to identify PMM improvement opportunities using project management best practices; evaluate and implement recommendations to improve project reporting; and broaden the PMM's applicability and use for different types of projects. The first initiative to develop a project rating matrix, which began in the fall of 2007, will focus on the development of a new set of criteria for determining project approvals, status reporting and general governance.

Geographic Information Systems (GIS) Expansion

GIS is a system of hardware and software used for storage, retrieval, mapping, and analysis of geospatial data. The GIS Director and the Kansas Data Access and Support Center located at Kansas University continue to work closely with local governments as well as Federal and State partners to more effectively utilize GIS technology. The analysis provided through GIS aids in better decision making, increased efficiencies and cost reductions. During FY07, demands for GIS services reached all-time highs. The availability of web-based GIS software has allowed more users to benefit from geospatial technology, resulting in a much larger return on investment.

Better Enterprise Architecture and Information Technology Planning

The State of Kansas Strategic Information Management Plan was updated during the last year. The effort included involvement from over 200 public and private sector individuals from across the state. The Strategic Plan, the Enterprise Architecture, the agency annual planning process and IT project request cycles form the basis for IT governance, oversight and collaboration on a continual basis.

Enterprise Architecture is also being employed to understand and utilize state resources as Legislature and Cabinet level committees review Projects and IT investments. Several agencies have made significant process in defining the interoperability of their business process with the help of the Kansas Information Technology Office.

As we look ahead to future collaborations and business process improvements, technology can and will provide the tools to facilitate more effective and efficient government services for the citizens of Kansas. Additional information about DISC services can be found at http://www.da.ks.gov/disc/.